

**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA**

AT BECKLEY

CENTER FOR BIOLOGICAL DIVERSITY,
et al.,

Plaintiffs,

v.

UNITED STATES FOREST SERVICE, *et al.*

Defendants,

v.

SOUTH FORK COAL COMPANY, LLC,

Defendant-Intervenor.

Civil Action No. 5:24-cv-00274 (Judge Volk)

DECLARATION OF CURTIS BRADLEY

I, CURTIS BRADLEY, declare that if called as a witness in this action I would competently testify of my own personal knowledge as follows:

1. I am a Geographic Information System (“GIS”) specialist at the Center for Biological Diversity (“Center”), where I have worked in this capacity for over 23 years. I hold a Bachelor of Sciences in mechanical engineering and a Master of Sciences in watershed management, both from the University of Arizona. I have training in several GIS software applications and have over 24 years of experience in GIS analysis and cartography.

2. I prepared the maps attached as **Exhibits 1-3** to this declaration concerning the endangered candy darter’s critical habitat and coal and equipment haulroads for the Rocky Run coal mine.

3. To prepare the maps, I used ArcGIS Pro version 3.3.1 GIS software from Esri and in my professional opinion it is accurate with respect to the data it represents.

4. Attached to this declaration as **Exhibits 1, 2, and 3** are true and correct copies of the maps I created showing the haulroads from the Rocky Run coal mine to the Clearco, West Virginia, preparation plant in relation to the candy darter's critical habitat. To create these maps I used data from several sources.

5. I downloaded GIS data from the U.S. Fish and Wildlife Service ("USFWS") representing the critical habitat of the candy darter. These data were obtained from the USFWS Environmental Conservation Online ("ECOS") webpage for the species at <https://ecos.fws.gov/ecp/species/1396>.

6. I downloaded data from the West Virginia Department of Environmental Protection ("WVDEP") representing the coal mine boundaries from their website at <https://tagis.dep.wv.gov/home/gis%20data>.

7. I downloaded data representing the U.S. Forest Service ("USFS") surface ownership from their geodata clearinghouse at <https://data.fs.usda.gov/geodata/edw/datasets.php>.

8. I used a map provided by the USFS showing locations of Forest Service roads 223 and 249, dated February 23, 2024, and found in the Administrative Record at AR17. I referenced this map in conjunction with the West Virginia Department of Transportation's 'All Roads' layer (available at <https://transportation.wv.gov/IT/GIS/Pages/DataCatalog.aspx>) to display the locations of the haulroads. For the portion of the coal haulroad that extended off the USFS map, I used the WVDEP coal mine boundary database referenced in 6 above to determine the locations of haul routes 1 and 2.

9. I obtained data from the Allegheny-Blue Ridge Alliance's ("ABRA") webmap representing the Notices of Violation for haul route 2 shown in **Exhibit 2** and **Exhibit 3**. The webmap can be found under the 'Coal Operations and Candy Darter Habitat' link on their website at <https://www.abralliance.org/>. According to the metadata, ABRA obtained these data from WVDEP's AppXtender database for Mining and Reclamation Article 3 ("SMCRA") Permitting, and Mining and Reclamation NPDES Permitting at <https://documents.dep.wv.gov/AppXtender>.

10. I used a digital elevation model from Landfire (<https://landfire.gov/data>) to create the 10-foot contours shown on the maps in exhibits B and C.

I declare under penalty of perjury that the foregoing is true and correct.

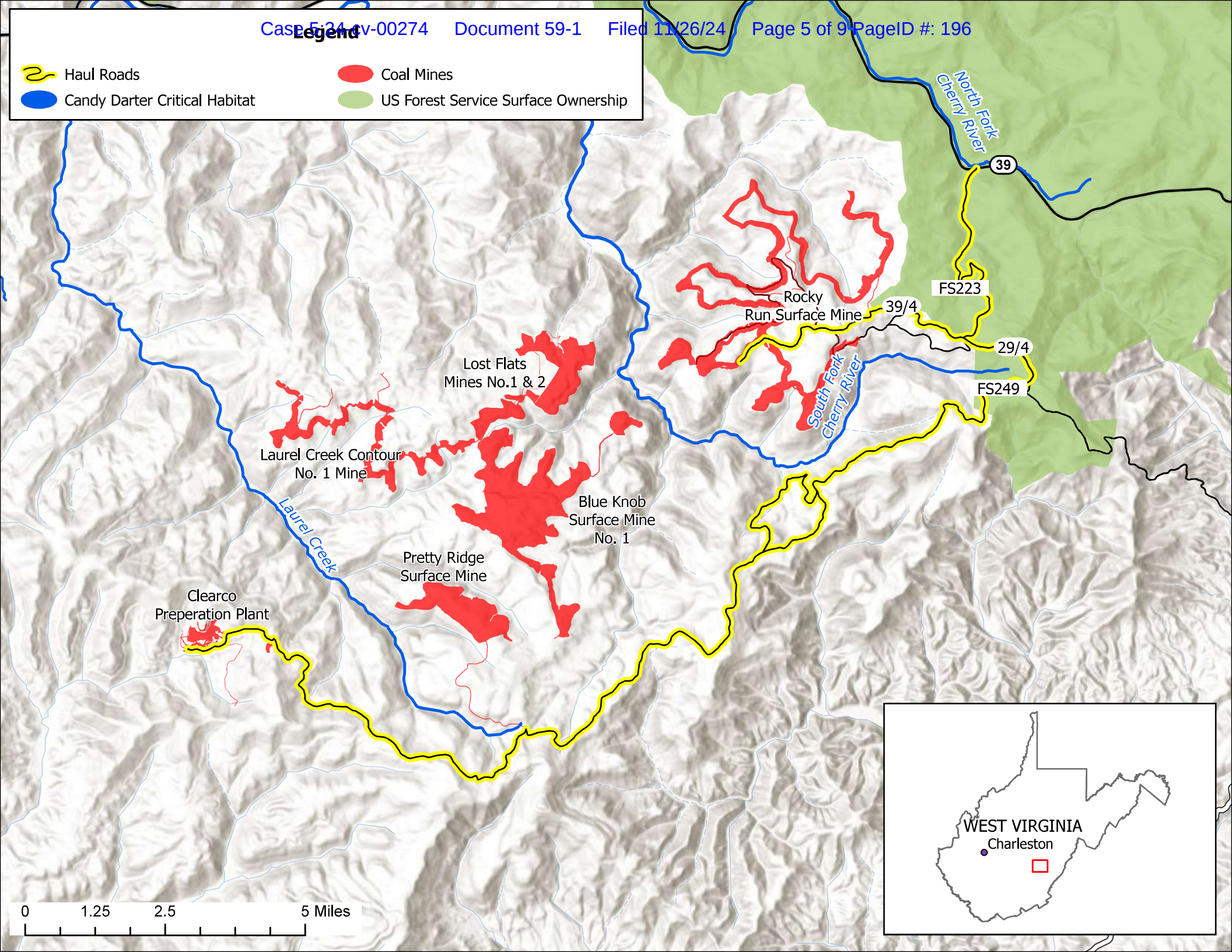
Executed on this 20th day of November, 2024, in Tucson, Arizona.


CURTIS BRADLEY

Exhibit 1
to Standing Declaration of Curtis Bradley

Legend

-  Haul Roads
-  Coal Mines
-  Candy Darter Critical Habitat
-  US Forest Service Surface Ownership



0 1.25 2.5 5 Miles



Exhibit 2
to Standing Declaration of Curtis Bradley

Legend

- | | |
|--|---|
|  Haul Roads |  10' Contour Lines |
|  Haul Road 2 Notice of Violations |  Coal Mines |
|  Candy Darter Critical Habitat |  US Forest Service Surface Ownership |

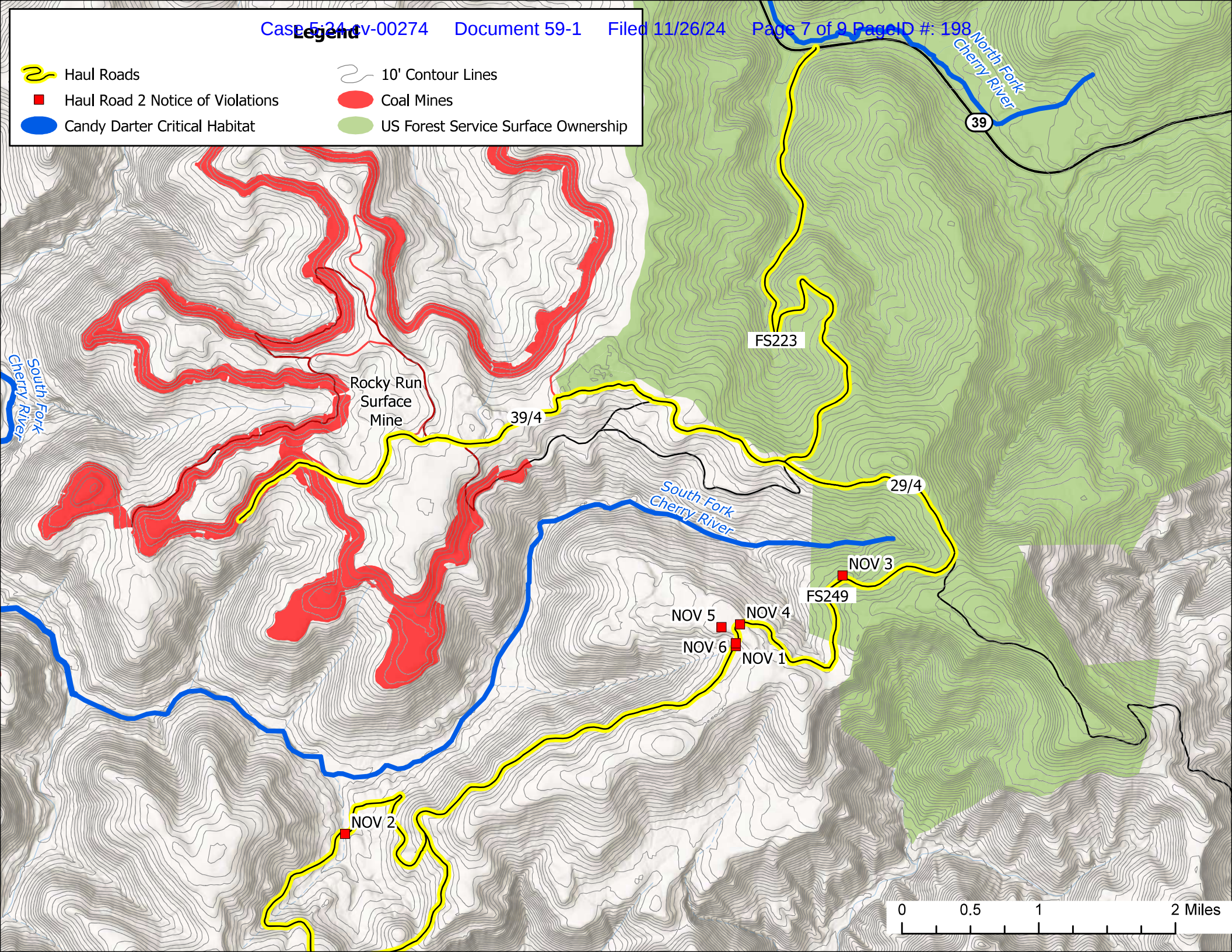
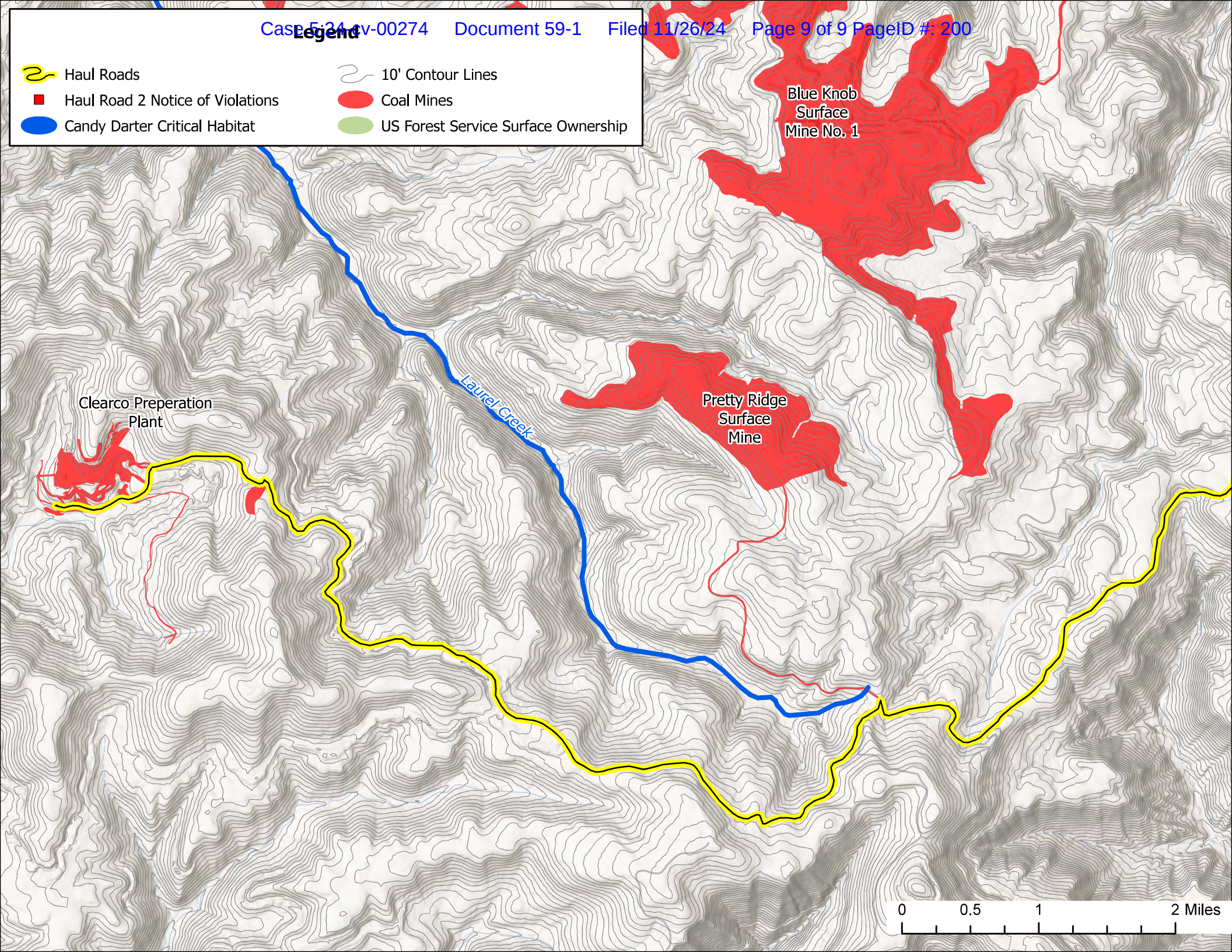


Exhibit 3
to Standing Declaration of Curtis Bradley

Legend

- | | |
|--|---|
|  Haul Roads |  10' Contour Lines |
|  Haul Road 2 Notice of Violations |  Coal Mines |
|  Candy Darter Critical Habitat |  US Forest Service Surface Ownership |



0 0.5 1 2 Miles